

# Exhibit 2

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY**

IN RE: VALSARTAN, LOSARTAN, AND  
IRBESARTAN PRODUCTS LIABILITY  
LITIGATION

**No. 1:19-md-2875-RBK**

**EXPERT REPORT OF KALI PANAGOS, PHARM.D., RPH.**

## **EXPERT DECLARATION OF KALI PANAGOS, PHARM.D., RPH.**

### **I. INTRODUCTION**

1. As an independent expert, I have been asked to render an opinion regarding what information third party payors (“TPPs”) rely on and consider with respect to generic drugs and, more specifically, the Valsartan and Valsartan Containing Drugs at issue in this litigation. .

2. The opinions I provide in this report are expressed with a reasonable degree of certainty based on my expertise and the information I have reviewed and been provided to date.

3. In the context of my preparation of this report, I reviewed the materials which are listed and identified on Appendix A.

### **II. QUALIFICATIONS AND EXPERIENCE**

4. I have earned two Bachelor of Science degrees from St. John’s University in New York; a Bachelor of Science degree in Biology with a minor in Computer Science as well as a Bachelor of Science degree in Pharmacy. I completed my Doctorate degree in Pharmacy (Pharm.D.) from Shenandoah University Bernard J. Dunn College of Pharmacy, Winchester, Virginia.

5. I am a registered pharmacist (R.Ph.) in the state of New York.

6. My clinical affiliations include a focus on pain management/anesthesia at The Hospital for Special Surgery, Cardiovascular & Lipid focus at Bellevue Hospital and Internal Medicine at Northwell Health, all in New York City.

7. I currently serve as EVP (Executive Vice President) of ARMSRx Pharmacy Benefit Consulting, a nationally recognized, independent organization dedicated to providing pharmacy benefit guidance to self-insured employers, brokers and TPAs/TPPs. I have over 20 years of experience, half of which has been dedicated to the managed care and pharmacy consulting industry overseeing Clinical Development, overall PBM Operations & Client Services/Management working primarily with self-insured clients, third-party administrators (“TPAs”) and TPPs.

8. I have served on the faculty and administration of Long Island University’s Arnold & Marie Schwartz College of Pharmacy in Brooklyn, New York. My roles at the LIU involved

teaching within the pharmacy program, serving on curriculum and academic committees and serving as the Director of the Pharmacy program determining if students are meeting the criteria to continue in the program and/or where gaps exist to assist students succeed. Presently, I also serve as an alumni mentor to upper level pharmacy students, primarily those students interested in non-traditional and managed care career paths at St. John's University College of Pharmacy in New York.

9. I have also served with the New York State Board of Pharmacy as an examiner for the pharmacy compounding licensure examination.

10. A full and current CV can be found at Appendix B.

### **III. PRIOR TESTIMONY AND EXPERT OPINIONS**

11. I have neither been deposed nor testified in any legal proceeding as a fact witness or expert in the past four years.

### **IV. PERTINENT BACKGROUND ON VALSARTAN**

12. In July 2018, the FDA announced a voluntary recall of Valsartan including Valsartan containing drugs (collectively referred to herein as "VCDs") due to contaminants (NDEA and NDMA). These contaminants are probable human carcinogens according to the International Agency for Research on Cancer (IARC) classification.<sup>1</sup>

13. VCDs belong to a class of medications known as Angiotensin Receptor Binders (ARBs) and are the approved generics of the brand name drug, Diovan and Diovan HCT respectively.

### **V. BACKGROUND ON TPP PHARMACY BENEFITS**

#### **a. TPPs**

14. The term TPPs generally refers to entities (other than the patient or health care provider) that reimburse and manage healthcare expenses including prescription drug benefits or coverage. In this matter, TPPs are specifically defined to include: All TPPs in the United States

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<sup>1</sup> <https://monographs.iarc.who.int/agents-classified-by-the-iarc/>

and its territories and possessions that, since at least January 1, 2012 to the present, paid any amount of money for valsartan-containing drug (intended for personal or household use) that was manufactured, distributed, or sold by any Active Pharmaceutical Ingredient, Finished Dose, Wholesaler, or Repackager/Relabeler Defendant.

15. Based on my review of the documents in this case, including the claims data provided by MSP Recovery Claims, Series LLC (MSPRC)(through its assignments from health plans), MSPRC and Maine Auto Dealers Association, Inc. Insurance Trust (MADA) are TPPs that fall within the class definition set forth above.

16. TPPs are the payors ultimately responsible, or at risk, for payments associated with their insureds' purchases. Along with the consumers, all TPPs share this essential commonality of responsibility and risk as the ultimate payer. Consumers pay their portion (referred to as Copay) and TPPs pay the remaining portion (also referred to as "plan paid").

17. TPAs manage claims processing, provider networks, utilization reviews, formulary, and membership.

18. The prescription drug pharmacy benefit represents eligible medications for reimbursement under the prescription drug benefit via the prescription formulary. The prescription drug benefit is different and apart from the medical benefit.

**b. PBMs**

19. A Pharmacy Benefit Manager (PBM) is a third-party administrator contracted to administer prescription drug plans for a variety of sponsors including commercial health plans, self-insured employer plans, union plans, Medicare Part D plans, and federal and state employee plans.

20. PBMs negotiate discounts off the purchase price of prescription drugs and pass those savings on to the payor. The "payor" could be an insurance company, commercial health plan, self-insured employer plan, Medicare Part D plan, Federal Employee Health benefit program, or state government plan. The PBM functions as the authorized agent on behalf of the third-party payor.

**c. PRESCRIPTION DRUG FORMULARIES**

21. PBMs often develop and manage drug formularies. The primary function of a formulary is to provide pharmacy care that is clinically sound and affordable for TPPs and their plan members and to help manage drug spend through the appropriate selection and use of drug therapy.

22. The typical development and management of the formulary occurs with the guidance of a Pharmacy & Therapeutic (P&T) Committee or equivalent body. A P&T committee is an external advisory body of experts from across the United States usually composed of independent health care professionals with broad clinical backgrounds and/or academic expertise regarding prescription drugs.<sup>2</sup>

23. The majority of P&T members are actively practicing pharmacists and physicians. The Centers for Medicare and Medicaid Services (CMS) also provides requirements for P&T committee composition. P&T committees are structured to provide non-biased, quality and evidence-based formulary decisions with the primary consideration being the clinical merit of the drug.

24. An example of P&T committee composition is as follows:

- a. 4 pharmacists (1 academic, 1 hospital, 2 geriatric);
- b. 18 physicians (representing broad specialties);
- c. Specialties represented: Allergy, Cardiology, Clinical pharmacology, Endocrinology, Family practice, Gastroenterology, Gerontology, Hematology/oncology, Internal medicine, Infectious disease, Pediatrics, Neurology, Medical ethics, Pharmacoeconomics, Pharmacology, Psychiatry, Rheumatology, Pharmacoeconomics, Pharmacology, Psychiatry, Rheumatology.

25. The P&T committee is required to base formulary decisions on scientific evidence, standards of practice, peer reviewed medical literature, accepted clinical practice guidelines and

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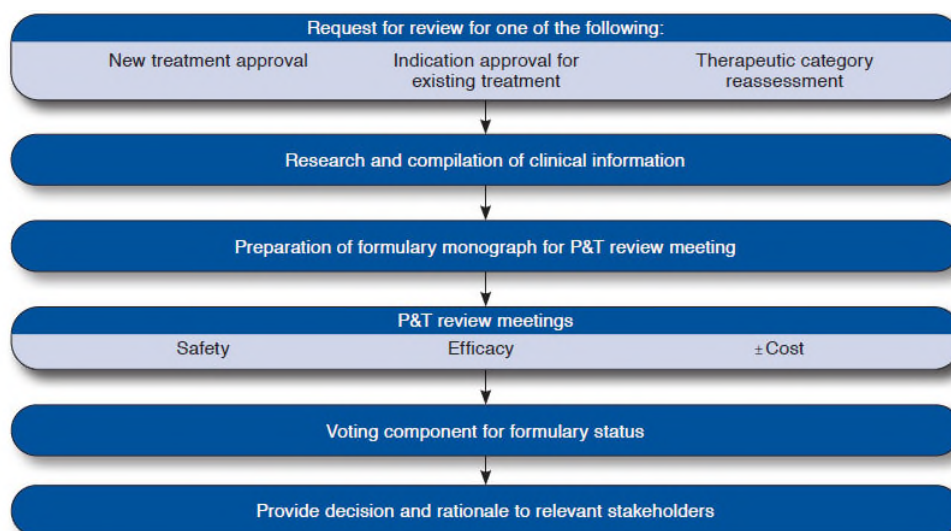
<sup>2</sup> In some cases, the development and management of a drug formulary is done “in-house” where the TPP will use its own P&T committee and might consult with the PBM. No matter which combination is used, the principles discussed herein are equally applicable.

other appropriate information. All reviews are to be conducted from a purely clinical perspective involving U.S. Food and Drug Administration (FDA) approved indications.

26. Typically, P&T committees meet on a quarterly basis and as needed to review issues that may arise which might impact the plan’s formulary.

27. Members of a P&T committee are subject to completion of a “conflict of interest” disclosure form as well as a “non-disclosure” annual agreement.<sup>3</sup>

28. The below demonstrative<sup>4</sup> shows how the P&T committee typically makes decisions regarding its drug formularies:



P&T=pharmacy and therapeutics.

#### d. ORANGE BOOK

29. The FDA created the Approved Drug Products with Therapeutic Equivalence Evaluations, known as the Orange Book, as guidance in creating formularies and to regulate substitution. The first edition appeared in October 1980; a new edition is published each year and cumulative supplements are made available on a monthly basis. Named for the orange cover of

<sup>3</sup> E.g., <https://www.caremark.com/portal/asset/FormDevMgmt.pdf>

<sup>4</sup> <https://www.jmcp.org/na101/home/literatum/publisher/jmcp/journals/content/jmcp/2020/jmcp.2020.26.issue-1/jmcp.2020.26.1.48/20191226/images/medium/fig1.jpg>

the book, it is now published in electronic form and accessible on the internet (electronic format). The publication contains a list of all the drugs approved for marketing in the United States.

30. The Orange Book lists drug products approved on the basis of safety and effectiveness by the FDA. The main criterion for inclusion of any product is that the product has a current, approved Abbreviated New Drug Application (ANDA). The Orange Book contains therapeutic equivalence evaluations for approved generic prescription drug products.

31. Generic drug manufacturers are permitted to avoid the expensive and lengthy New Drug Application process (NDA) by filing an ANDA, where a generic drug must contain the same active ingredient, route of administration, bioequivalence (rate and extent of drug absorption), and other characteristics as the brand version.

32. The Orange Book consists of five main sections: an introduction, a “how to use” section, the drug product lists, appendices, and a patent and exclusivity information addendum. The drug product list consists of all approved drug products and their respective therapeutic equivalence codes.

**e. DEFINITIONS AND SIGNIFICANCE OF THERAPEUTIC EQUIVALENCE CODES**

33. The Orange Book has created a list of Therapeutic Equivalence (TE) Codes. These codes are as follows:

- *Pharmaceutical Equivalents*: drug products which contain the same active ingredients in the same strength and dosage form delivered by the same route of administration.
- *Bioequivalent Drug Products*: drug products that have shown comparable bioavailability when studied under similar conditions (e.g. the rate and extent of absorption of the test drug does not significantly differ from the reference drug).

34. These TE Codes are further divided into two categories, A-rated and B-rated.<sup>5</sup>

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<sup>5</sup> B-rated drugs are not at issue here.



35. A-rated Drugs are those which the FDA considers to be therapeutically equivalent and, therefore substitutable where permitted by the prescriber. They are further divided as follows:

36. AA: ingredients and dosage forms presenting neither actual nor potential bioequivalence problems (e.g. oral solutions). Some dosage forms are assigned specific codes based on criteria used to demonstrate bioequivalence.

37. AN=aerosolized drugs, AO=injectable oil solutions, AP=injectable aqueous solutions, AT=topical products.

38. **AB rated Drugs:** actual or potential bioequivalence problems have been resolved through adequate in vivo and/or in vitro testing.

39. AB rated generic drugs signify that they are interchangeable with the brand drug and the manufacturers of the generic drug have adequately fulfilled the requirements as set forth by the FDA for approval.

40. AB rated generic drugs are identical versions of the Reference Listed Drug (RLD) brand drugs in terms of the following: pharmacokinetic and pharmacodynamic properties, mechanism of action, efficacy, safety, dosage, strength, intended usage, and route of administration.

41. TE codes followed by numbers: applied when there are two or more drug products containing the same ingredient, with the same strength and dosage form, which are not bioequivalent to each other. In such instances, there will be more than one RLD and any generic seeking approval must prove bioequivalence to one particular RLD.

**f. ENTRY INTO THE ORANGE BOOK**

42. In seeking approval for a brand drug through a NDA, applicants are required to list with the FDA certain patents whose claims cover the applicant's product. Upon approval of an NDA, each of the patents listed in the application for the drug is then published in the Orange Book.

43. Any applicant who files an ANDA seeking approval of a generic equivalent version of a drug listed in the Orange Book or 505(b)(2) NDA referencing a drug listed in the

Orange Book must certify to the FDA, for each patent listed in the Orange Book for the referenced drug, that:

- a. No patent information on the drug product that is the subject of the application has been submitted to the FDA;
- b. Such patent has expired;
- c. The date on which such patent expires or;
- d. Such patent is invalid or will not be infringed upon by the manufacturer, use or sale of the drug product for which the application is submitted.

**g. WHAT TPPs RELY ON IN MAKING FORMULARY DECISIONS FOR GENERIC DRUGS**

44. A generic drug is a copy of a branded drug in terms of dosage, administration, and performance. Generic drugs must be “bioequivalent” to the branded drug, meaning the generic drug will work the same way in the body and be as safe and effective as the brand name drugs.

45. Substitution of generic equivalents (drugs considered bioequivalent by FDA) are encouraged by PBMs to provide the best care at an affordable cost.

46. Use of generic drugs that have been deemed bioequivalent by the FDA does not require a new round of review or approval by a P&T committee, because the TPPs and P&T Committees expressly rely upon the manufacturers’ compliance with all applicable standards, obligations, and regulations.

**47. The “AB” rating in the FDA Orange Book, based as it is on the generic drug manufacturer’s ANDA, represents a manufacturer’s warranty to TPPs and P&T Committees for placement on a prescription drug formulary.<sup>6</sup>**

48. A generic drug product is legal in the United States if it has an ANDA approved by the FDA. A generic drug that is not ANDA approved would be illegal to sell in the United States.

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<sup>6</sup> <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines/gdl-pharmacy-therapeutics-committee-formulary-system.ashx>.

49. When the FDA approves a drug, it is deemed to be safe and effective to use.
50. For generics, FDA approval means that a drug is not only deemed to be safe and effective but also bio-equivalent.
51. In order to obtain FDA approval of a generic drug as an Orange Book listed drug, a manufacturer is required to demonstrate that its generic drug is bioequivalent to the RLD.
52. Manufacturers are responsible for understanding their processes which includes preventing the presence of unacceptable and impurities.
53. They are responsible for developing and using suitable methods to detect and limit unacceptable impurities, including any new impurities that may arise when they make changes to their manufacturing processes.
54. Maintaining equivalence to the RLD is an ongoing requirement.
55. P&T committees and TPPs rely on an Orange Book listing that a manufacturer's compliance means their drugs meet FDA regulations and as such are suitable for formulary placement and reimbursable under a prescription drug benefit plan.
56. When third party payors agree to reimburse for generic drugs such as valsartan including VCDs, they do so based on the warranties made by manufacturers that their drug product is in compliance with the FDA, bioequivalent of the Orange Book reference drug and safe to be sold to consumers.
57. In the case of valsartan, including VCDs, warranties by the manufacturers were false. As such, TPPs paid for medications they should not have paid for. In fact, these VCDs never could have been sold in the United States.
58. TPPs are entitled to rely on a manufacturer's compliance with Orange Book standards when reimbursing for what was represented as generic valsartan, including VCDs.
59. The presence of the contaminant rendered the manufacturer defendants' versions of VCDs **not** equivalent to the branded product as indicated in the Orange Book which serves as the source of truth for bioequivalence.

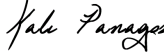
## VI. SUMMARY OF OPINIONS

- A. The safety of a medication must be proven by the manufacturer to the FDA so that the medication may receive approval.
- B. This information serves as the warranty for the medication ensuring that it meets the quality standards outlined by FDA.
- C. Manufacturers have ultimate responsibility for their quality process and the information presented in the ANDA which is reported to the FDA to obtain approval.
- D. If the generic manufacturer product changes in any way from the original product on the ANDA approval, then this changed product is not the same as the brand name medication; equivalence is nulled and the generic manufacturer may no longer rely on the brand name drug label.
- E. TPPs, PBMs and P&T committees rely on the FDA approval as the indicator that the medication may be considered for formulary placement and plan coverage/reimbursement.
- F. The Orange Book lists the FDA approved generics of the original brands. These FDA approved generics can be put on a prescription drug formulary and/or plan coverage for reimbursement.
- G. The TPPs in this matter were all payors at risk for and made payments in connection with their insureds' purchases of VCDs.
- H. TPPs reimbursed for these VCDs based on the warranty provided by the manufacturer and PBMs establish formularies of bioequivalence based on the FDA approval process and information within the Orange Book.
- I. The warranty from manufacturers for these products turned out to false. TPPs paid for medications that they should not have based on the manufacturer's false representation.

J. In my professional opinion, the manufacturer warranty for these VCDs was false. The TPPs unjustly paid for medications for which they should not have paid. Manufacturers are accountable for the false warranty and representation of their drug products.

The foregoing opinions are a true and correct statement of my opinions to the best of my knowledge, information and belief under penalty of perjury.

November 9, 2021

DocuSigned by:  
  
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Kali Panagos, Pharm.D., R.Ph.

# Appendix A

## List of Materials Reviewed -- Expert Report of Kali Panagos, Pharm.D., R.Ph.

**APPENDIX TO EXPERT REPORT OF KALI PANAGOS, PHARM.D., R.PH.**

**LIST OF MATERIALS REVIEWED**

AJMC (American Journal of Managed Care). *How Drug Life-Cycle Management Patent Strategies May Impact Formulary Management*. Jan 20, 2017, volume 22, Issue 16

Amended Confidentiality Protective Order and Signature Page

Angiotensin II Receptor Blockers (ARBs), <https://www.ncbi.nlm.nih.gov/books/NBK537027/>

ASHP Report: *ASHP Guidelines on the Pharmacy and Therapeutics Committee and Formulary System*. In: American Journal of Health-System Pharmacist, Volume 76, Number 10, May 18, 2021, also found at <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines/gdl-pharmacy-therapeutics-committee-formulary-system.ashx>.

Chan, C, PharmD. *Why are numerous drugs being recalled due to cancer-causing contaminants?*  
In: Pharmacy Today, October 2021

Coordination of Benefits & Third Party Liability  
<https://www.medicaid.gov/medicaid/eligibility/coordination-of-benefits-third-party-liability/index.html>

*Formulary Development and Management at CVS Caremark*,  
<https://www.caremark.com/portal/asset/FormDevMgmt.pdf>

Declaration of Third Party Payor Humana Inc.

Declaration of Margaret Finn

Deposition transcript of Tom Brown, President of Maine Automobile Dealers Association, Inc.  
Insurance Trust Pursuant to Fed. R. Civ. P. 30(b)(6), May 28, 2021

Deposition transcript of Christopher Miranda, Corporate Representative of MSP, April 29, 2021

Excerpts from MSP Data: Detail Claim Report (HMO fields added), July 6, 2021

*Agents Classified by the IARC Monographs*, IARC Monographs on the Identification of Carcinogenic Hazards to Humans,” International Agency for Research on Cancer, World Health Organization, <https://monographs.iarc.who.int/agents-classified-by-the-iarc/>

Journal of Managed Care Pharmacy,  
<https://www.jmcp.org/na101/home/literatum/publisher/jmcp/journals/content/jmcsp/2020/jmcp.2020.26.issue-1/jmcp.2020.26.1.48/20191226/images/medium/fig1.jpg>

MADA claims data for recalled Valsartan (four spreadsheets)

Mayo Clinic – Disease conditions: High Blood Pressure – Angiotensin II receptor blockers  
MSP 1547, data for payments for recall vs. not-recalled

Navigating Drug Formularies in Pharmacy Benefit Management

<https://www.pharmacytimes.com/view/navigating-drug-formularies-in-pharmacy-benefit-management> Kruczek, N BS Pharm., Jan 8, 2020

Orange Book Preface. Retrieved from: [www.fda.gov/drugs/development-approval-process-drug/orange-book-preface](http://www.fda.gov/drugs/development-approval-process-drug/orange-book-preface)

MADA Third Party Payor Plaintiff's Fact Sheet

MSP Third Party Payor Plaintiff's Fact Sheet

Principles of a sound drug formulary system. In: Hawkins, B ed. *Best Practices for Hospital and Health-System Pharmacy: Positions and Guidance Documents of ASHP* American Society of Health-System Pharmacists; 2018: 233-236

Recall status of NDCs Listed on MSP 0001547 and 0001548

Remote Deposition of Patricia Cobb, October 21, 2021

Rodgers JE, Patterson JH. Angiotensin II-receptor blockers: clinical relevance and therapeutic role. *Am J Health Syst Pharm.* 2001 Apr 15;58(8):671-83. [[PubMed](#)]

Third Amended Consolidated Economic Loss Class Action Complaint, *In re Valsartan, Losartan and Irbesartan Products Liability Litigation*, Case 1:19-md-02875-RBK, Doc. 1708, November 1, 2021.

U.S. Food and Drug Administration. Development Approval Process

[www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/angiotensin-ii-receptor-blockers/art-20045009](http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/angiotensin-ii-receptor-blockers/art-20045009)



# Appendix B

Kaliopi Panagos CV

# Kaliopi Panagos, Pharm.D., R.Ph., B.S.

## Healthcare-Pharmacy-Managed Care Leader

Current Residence: Bayside, New York | 917-309-7398 | [k.panagos@gmail.com](mailto:k.panagos@gmail.com)

Linkedin: <https://www.linkedin.com/in/kali-panagos-9069ba9/>

### Executive Overview

Dynamic, hands-on leader with over twenty years of experience. Supportive, persuasive and tenacious with a focused ability to empower teams to deliver the highest quality in the areas of overall PBM operations, clinical development and client/account/member services. Highly effective at driving growth, increasing efficiency, maximizing client satisfaction while achieving positive business results. Solid communication and interpersonal skills with superior expertise in overall PBM operations, strategy, design and execution of market competitive programs and clinical offerings rooted in integrity.

### Key Strengths

- ✓ Problem Solving /Critical Thinking
- ✓ PBM Expertise/Resource allocation
- ✓ Adaptable/Emotional Intelligence
- ✓ Process improvement/Team Engagement
- ✓ Accountable/Results Driven/Responsible
- ✓ Organized/Creative/Innovative

### Professional Experience

ARMSRx Pharmacy Benefit Consulting, LLC

*Executive Vice President, ARMSRx*

5/2021-present

*Senior Vice President, Clinical and Consulting*

2/2019-4/2021

AristaRx Wellness, LLC, New York, NY

*Principal & Founder – Pharmacy Benefit Consultant*

2018-present

Council of Strategic Healthcare Advisors

*Current Panel Advisors-Managed Care Expert*

2018

SmithRx, San Francisco, CA

*Director of Clinical Services*

2018

Very early-stage start-up pharmacy benefit administrator – Series A Funding. Lead clinical development, strategy and process. Also supported hiring process, training and sales support. Implemented multiple workflow process improvements and provided guidance for growth with an emphasis on strong, trusting client relationships.

- Clinical Expertise: Meaningful Clinical Interventions resulted in over \$100,000 in savings

Broadreach Medical Resources, Inc, New York, NY

*(Prescription Benefits Administrator)*

*Clinical Pharmacist/Director of Clinical Operations/Head of Client Services & Account Management*

2008-2018

Privately held Pharmacy Benefit Administrator. Joined company early stages of development and quickly took on a broad scope of responsibility. Boosted revenue for company through meticulously developed and managed clinical programs, continual member support team education, training and management and product innovation.

Highlights include:

- Established, built and maintained trusting, positive, professional relationships at all decision levels within managed care client base
  - ~150,000 total lives (includes self-insured Labor, Hospital Sector, Commercial plans, Reference Based Program, Discount Card & MedicareD EGWP)
- Developed industry exclusive prescription indemnity/reference based program
- Designed evidence based, market competitive clinical programs with documented ROI
- Managed integration of data across medical and prescription including Population Health & Enrollment Analytics
- Served as subject matter expert on all PBM, clinical, drug and specialty items
- Managed vendor/partner relationships including Claim Adjudication platform, specialty & mail
- Implemented audit programs to ensure clinical and financial validity

Long Island University College of Pharmacy, Brooklyn, NY

*Director of Pharmacy Academic Services*

2002-2006

*Adjunct Assistant Professor of Pharmacy, Division of Social & Administrative Sciences*

2004-2009

- Responsible for measurement of student achievement and curriculum performance
- Implemented a comprehensive program of assessment for the purpose of programmatic improvements in accordance with the Accreditation Council for Pharmacy Education (ACPE) accreditation requirements for the College of Pharmacy
- Advised/co-chaired various committees including: assessment, academic, faculty and administration to implement and review effective strategies for assessment of student learning on all levels
- Managed team of four academic advisors and three support personnel

Walgreen's Pharmacy, New York, NY

*Immunizing & MTM Pharmacist (full-time/part-time/per-diem)*

2000-2015

- Lead pharmacist in highest RX volume store in NYC district (>600 RX/day)
- Expert counseling on prescriptions and OTC, Nutritional, Vitamins and Holistic therapies
- Managed and trained pharmacy interns & technicians

NYS Board of Pharmacy, New York, NY

*State Board Exam Compounding Proctor & Grader*

2002-2009

- Exam supervisor, facilitator and evaluator for accuracy

## Education

**NYS Pharmacist License 470480**

DOCTOR OF PHARMACY, Shenandoah University (1/2006)

BACHELOR OF SCIENCE-PHARMACY, St. John's University (1/2000)

BACHELOR OF SCIENCE- BIOLOGY Minor: COMPUTER SCIENCE, St. John's University (5/1997)

NYS Office of the Professions Additional Qualification – Immunization Certified

American Heart Association BLS+CPR Certified (Adult, Child, Infant)

Outcomes MTM Medication Therapy Management Trained

NYS Department of Financial Services Independent Adjuster License Producer

## Professional Organizations

AMERICAN COLLEGE OF HEALTHCARE EXECUTIVES (ACHE)

ACADEMY OF MANAGED CARE PHARMACY (AMCP)

WOMEN LEADING HEALTHCARE MEMBER (WBL)  
HEALTHCARE BUSINESSWOMEN'S ASSOCIATION (HBA)  
AMERICAN ASSOCIATION OF CONSULTANT PHARMACISTS (ASCP)  
AMERICAN SOCIETY OF HEALTH SYSTEM PHARMACISTS (ASHP)

## **Clinical Affiliations**

NYU – BELLEVUE MEDICAL CENTER, NEW YORK, NEW YORK  
Lipid, Cardiovascular & Anticoagulation Focus

NORTHWELL HEALTH UNIVERSITY, MANHASSET, NEW YORK  
Diabetes & Internal Medicine Focus

HOSPITAL FOR SPECIAL SURGERY, NEW YORK, NEW YORK  
Anesthesiology & Pain Management Focus

Advisory Panel Member – AMGEN for Repatha

## **Skills & Activities**

### **TECHNOLOGY & BUSINESS**

- ✓ Proficient in MS Office Programs (Word, Excel, PowerPoint)
- ✓ PBM operations management
- ✓ Expertise in contracting language, review and negotiation
- ✓ Expertise in vendor/client relations
- ✓ Financial claim and clinical audit expertise
- ✓ Knowledge of RFP process, requirements and evaluation
- ✓ Expertise with various PBM claim adjudication platforms
- ✓ Knowledge of healthcare regulatory requirements including 340B, MedD, EGWP
- ✓ Healthcare/PBM billing, reimbursement and rebate methodologies
- ✓ Healthcare coding methodologies (Medispan, FDB, JCodes, ICD-9 and HCPCS)

### **COMMUNICATION**

- ✓ Presenter – PBMI Opioid epidemic, Health Underwriters organizations
- ✓ Newsletter/Social Media/White Paper communications content writer
- ✓ Strong writing skills
- ✓ Bilingual – Fluent in English & Greek

### **COMMUNITY LEADERSHIP**

- ✓ St. John's University Pharmacy program mentor
- ✓ NYC Department of Education parent leader for in-classroom read-a-loud
- ✓ Youth Group Advisor for community organization
- ✓ Wellness & medication educator for seniors for community organization

**PERSONAL**

- ✓ Preventative therapy advocate, functional medicine and optimizing mind & body
- ✓ Wellness & exercise enthusiast (former gymnast)
- ✓ Participating member of NYC Road Runners Club (2 years)
- ✓ Regular discipline of classical stretching, pilates and HIIT exercises
- ✓ American Red Cross and New York Blood Donor